

9 COMMON APPLE TREE DISEASES: ID, PREVENTION, AND TREATMENT

Apples are iconic fruit trees for home gardens, but they may see some diseases during their lifetime that threaten successful harvests. Learn how to prevent and treat these pathogens and they'll be issues no more. Join backyard gardener Jerad Bryant in identifying and banishing these 9 common apple tree diseases.



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Apples, roses, and hawthorns are **susceptible to many tree diseases**, partially because they're all a part of the rose family Rosaceae. They're age-old plants that we cultivate repeatedly each decade, which provides diseases with a steady supply of new varieties to target. Although these diseases seem serious, there is a wealth of options for home gardeners to **treat and prevent them before they spread**.

Some issues are purely cosmetic and affect the leaves, while others cause rotten or moldy apples. Practice good cultural methods like cleaning fall apples and proper pruning for most of these issues to go away. If this fails to work, you may have to bring out some treatments. Water, organic sprays, and pruning all work to mitigate pathogen damage before it harms your tree. Keep reading to **learn which treatments work best for each disease.**

Apple Scab



Regular pruning and cleanup help prevent fungal spot outbreaks.

Scab works like how it sounds! It starts as small, green-brown, hard spots on leaves and apples. They spread slowly as the fungus that causes it *Venturia inaequalis* excels and grows. This disease may not be that serious although it can **grow out of control** and cause misshapen or rotten fruit come harvest time.

How to Identify

Apple scab starts in spring as small, dark green spots on leaves and fruit. They start no bigger than half of an inch wide. The spots creep outward as the season progresses,

causing **raised brown-green bumps** on leaves and black ones on ripening fruit. In severe infections, the leaves start falling from the tree prematurely after turning entirely brown.

How to Prevent

Prevent scab by cleaning and pruning your tree annually. Rake and move the deciduous leaves in the fall, and clean up any fruit lying on the ground. **Add them to hot compost** to kill the fungus, or dispose of them far away from your apple orchard. The fungus can survive overwinter on old debris, so cleaning it up is the best way to keep it from reinfecting your apples.

How to Treat

Sulfur fungicide is the primary organic method for treatment. Apply it in early spring if you see small spots that signal an infection. Avoid applying the product after the flowers open, as it can harm pollinators while they visit the blossoms. With sulfur treatments and preventative measures, scab spots will disappear from your trees before next season.

Powdery Mildew



White, powdery spots on leaves indicate potential fungal infection.

Powdery mildew gets around! It infects many hosts from different plant families, like squash, apples, and dandelions. White-gray powdery spots start on the tops or bottoms of the leaves and spread throughout the tree in **dry and warm conditions**. Powdery mildew rarely affects apple harvests, although it can in severe cases.

How to Identify

Look for white, **powdery spots** on apple leaves. Two fungal species cause the spots, and they thrive in summer when the air is dry and warm. Spots will start small, but they'll grow and infect new, tender leaves and stems. You'll notice **curly or deformed leaves** and a lack of blossoms or fruit. Apples with powdery mildew develop russet-brown patterns that affect their quality.

How to Prevent

Powdery mildew thrives on dense, crowded branches. **Prune your tree annually** to maintain an open crown that lets air flow through these branches. If your tree had the disease this year, clean up its fruit and leaves in autumn and dispose of them away from the site.

How to Treat

A simple solution of potassium bicarbonate, castille soap, and water [creates an effective treatment spray for powdery mildew](#). **Create a solution** with one tablespoon of potassium bicarbonate powder, one

teaspoon of soap, and one gallon of water.

Stir and shake it, then apply it in the morning or afternoon when pollinators aren't active. Organic sulfur and copper fungicides also work well—follow their package's instructions for proper application rates.

Fireblight



Look for sudden dieback of twigs and blackened, shriveled leaves.

Fireblight is one of the worst apple tree diseases. It affects most species in the Rosaceae family, including apples, pears, and hawthorn. It's a nasty disease spread by the bacterium *Erwinia amylovora* during wet, cool weather while the trees bloom. It infects the blossoms and spreads throughout the branches, causing shriveled, black foliage and flowers. Fireblight is a severe infection because it can **overwinter in cankers** on the tree and start spreading in early spring.

How to Identify

Look for new growth that suddenly dies. As the bacterium spreads, it causes dead and shriveled twigs, leaves, and flowers. Wherever dead

twigs are, the **bacterium is spreading**. After rainfall, a sticky, white substance seeps out of infected twigs.

How to Prevent

Prune off any infected wood during cool weather before the apple tree breaks dormancy. Cut at least a foot below black, brown, or mottled branches. Use **clean pruners**, and **disinfect them** after every cut with a disinfecting solution.

Avoid adding excess fertilizer in the fall, as it can cause weak growth that is highly susceptible to fireblight. Consider growing apple varieties resistant to the bacterium if this pathogen is prevalent in your garden. Types like 'Gold Rush,' 'Honeycrisp,' and 'Liberty' resist infection with natural defenses in their DNA.

How to Treat

First, prune off any visible signs of infected wood. Once an infection starts, there are few organic chemical controls available to kill the bacterium. One solution that most apple growers employ is **applying copper fungicide** to apple buds before they break dormancy in spring. This prevents infections from occurring and slows their spread.

Juniper Rusts



Watch for yellow spots with orange rims on infected leaves.

Juniper rusts are crazy-looking fungal infections that need two hosts to complete their life cycle. Three main types infect apples: **cedar-apple rust**, **cedar-quince rust**, and **cedar-hawthorn rust**. The fungi first infect trees and shrubs in the *Juniperus* genus, then spread to plants in the Rosaceae family.

These infections are particularly present on the East Coast where lots of apples and junipers grow.

How to Identify

These rusts look different on junipers than they do on apples. Infections on nearby junipers will be orange, brown, or white, and they erupt with gelatinous, orange substances in **wet spring weather**. Apples show signs on their leaves and fruits—look for yellow spots with orange rims and black margins. Infected fruits are tiny with shriveled skin.

How to Prevent

Rust spreads from galls and cankers on junipers to apple trees. Prune off any nearby galls and cankers on juniper species, and **clean up infected apples** and leaves from your trees. Dispose of them far from your orchard so the fungi don't reinfect the trees. Consider removing junipers if they are frequent hosts to these rusts.

How to Treat

First, use rust-resistant varieties like 'Liberty' where they're prevalent. **Organic sulfur fungicides** work well at killing infections on leaves and branches. Apply it as often as necessary, and use the dosage that the package recommends.

Black Rot



Look for small purple leaf spots that develop lighter centers.

Black rot creates a mushy mess! It's no fun, especially because it can affect ripening apples no matter how mature. Black rot also goes by the name **frogeye leaf spot** because it starts as leaf spots that look like frogs' eyes. It starts from the fungus *Physalospora obtusa*. It may also spread to old wounds and infections, causing black wood to form. Prevention helps stop the damage before it affects your harvest.

How to Identify

Watch for light leaf spots with brown and black margins that resemble frogs' eyes. They'll start as **small purple dots and slowly open up with lighter centers**. Infected fruits have purple dots on their undersides that grow into mushy rot. You'll see black and brown lines growing on

the apple's underside, and the area will be soft to the touch.

How to Prevent

This fungus overwinters inside shriveled, rotten apples that stay on the tree. They create spores that spread as the weather warms in spring. **Remove all apples from your tree** in autumn or winter before the buds break dormancy. Rake all leaves with frog-eye leaf spots away from the site and dispose of them or add them to hot compost.

How to Treat

Stressed trees are more susceptible to black rot. Ensure they have the necessary **water, nutrients, sunlight,** and **airflow**. Copper or sulfur fungicides prevent infections but can't kill the diseases once the apple tree contracts them. Practice good cultural hygiene, apply compost annually, and remove black branches or spotted leaves.

Flyspeck and Sooty Blotch



Fungal infections may appear unsightly but don't affect edibility.

These two separate fungal diseases often occur together and have similar treatment methods. These diseases sound bad, but they are mainly **cosmetic issues** that affect the apples' appearance without

significantly harming the tree. They are unsightly, but they don't affect the inside of the fruit, and the apples are edible despite the infections.

How to Identify

Flyspecks are present as **little black dots on apples' skin**. They raise slightly above the skin and occur in clusters of a few dozen. Sooty blotch is a green-black or brown blotchy coating that starts as small circles and spreads over the skin. You can rub it off to reduce its spread, but you can't rub off flyspeck.

How to Prevent

These two fungal conditions often occur together during warm, wet weather on trees with poor air circulation. Prune your trees annually, removing crisscrossing branches and dead or diseased wood. If sooty blotch and flyspeck are prevalent in your ecoregion, consider using [resistant apple varieties](#) like 'Enterprise' or 'Pristine.' When apples are small early in the growing season, remove clusters so that one or two fruits remain. Dense apple clusters promote these two fungi. You can also add compost near the root zone to ensure your specimens have the nutrients, water, and air they need to thwart these infections.

How to Treat

Rub off sooty blotch marks before they spread further. **Organic copper or sulfur fungicides** treat these infections and keep them from

growing. Apply either in the morning or afternoon according to the package's instructions.

Nectria Twig Blight



Prevent infections by pruning wisely and managing tree wounds.

Twig blight is an apple tree disease that looks similar to rust. It starts on wounds, injuries, or pruning marks where the fungus can infect the tree. It causes **dieback and leaf shriveling**, and it can spread to other healthy areas if you don't treat it. Nectria twig blight isn't as damaging as other conditions like fireblight, but it can still cause minor losses by sucking energy from your orchard.

How to Identify

Nectria twig blight starts as a canker that spreads to twig ends. You'll notice black, shrunken wood, dead leaves, and rotten fruit or flowers. Unlike fireblight, there is no oozing sap from twig blight wounds. You may see orange or red dots on the cankers in late summer and autumn—they help the fungus spread to new wounds and injuries.

How to Prevent

Keep twig blight away by **pruning at the correct time** for your ecoregion. Winter pruning can open up wounds

that invite fungi like twig blight to come in and set up shop. Prune on dry, cold days before the buds break dormancy so that the wounds heal quickly.

How to Treat

Since this blight isn't as prevalent as others, there aren't many treatment options available. **Dispose of diseased branches** far from the site or **burn them** to prevent the blight from creeping into other species. Remove entire trees if the sickness is on the central leader or main trunk.

Canker



Promptly remove cankers to protect your trees' health.

Apple tree canker comes from a similar fungus that causes necrotic twig blight disease. Necrotic twig blight is from a *Nectria* fungus, while apple canker comes from *Neonectria ditissima*. This canker looks similar to twig blight with **black or brown withered wood**, orange dots on the wounds, and dying foliage. Cankers are perennial, so it's important to remove them before they spread spores to new branches.

How to Identify

Canker develops on twigs, branches, or trunks from wounds and injuries. The bark struggles to seal the wound, and the **fungus causes decay** at an accelerated rate. Left to grow, cankers can kill or seriously harm your apple trees. They develop white spots that spread spores in the summer, and red or orange ones that disperse them in winter and spring.

How to Prevent

Canker seems more prevalent on apples in wet, soggy, acidic soil than those growing in suitable sites. It starts infecting wounds or cuts made at improper times during the year. Prevent cankers by **watering once the soil dries**, correcting **soil pH levels** to be neutral or slightly alkaline, and pruning in late winter or early spring. If cankers start, remove them promptly to prevent further infections.

How to Treat

Chemicals do little to cankers once they take hold of your tree. **Remove any cankers you see** by cutting them down to fresh, green wood without signs of infection. Clean the pruners with a plant-safe disinfectant between each cut to avoid reinfection.

Fruit Cracking



Maintain consistent moisture to prevent splitting in fruits.

Fruit cracking isn't a disease but a serious physiological condition that affects many apples in late summer and fall. It'll cause your apples to **split open**, exposing their tender flesh to the elements. Once split, the wounds invite [pests](#) and diseases that can further harm your tree.

How to Identify

Fruit cracking happens **during wet weather after previously dry conditions**. It also occurs in tomatoes during similar weather.

The trees suck up excess water as it becomes available, and they expand their fruits quicker than the skins can stretch. Small cracks grow into big ones, and pests and diseases may be present on old wounds.

How to Prevent

Prevent fruit cracking by **maintaining consistent moisture levels** throughout the summer. Cracking occurs when rain and humidity come after high temperatures and dry weather. Irrigate your apples during dry spells, and avoid excess pruning during summer and fall to keep water from escaping.

How to Treat

If you see fruit cracking, harvest the apples immediately and eat or process them. Cut off the cracks if they have rot, then you can safely eat the non-mushy parts. I grow apples at home and see lots of fruit

cracking after overly dry summers in autumn as the fruits swell.

Cracked apples taste normal, although they'll rot if you leave them on the tree. Once an apple cracks, there is **nothing to stop it from continuing**. Harvest and process cracked apples, and maintain consistent moisture levels next year to keep splitting at bay.